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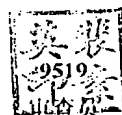
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(无审查业务专用章
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申请号: 00803994.1

部门及通知书类型: 9--C

发文日期:

申请人:

三星电子株式会社, 加利福尼亚大学董事

发明名称:

数字视频处理方法及其装置



第一次审查意见通知书

(进入国家阶段的 PCT 申请)

1. ☒ 依申请人提出的实审请求, 根据专利法第 35 条第 1 款的规定, 审查员对上述发明专利申请进行实质审查。

☐ 根据专利法第 35 条第 2 款的规定, 国家知识产权局决定自行对上述发明专利申请进行审查。

2. ☒ 申请人要求以其在:

US 专利局的申请日 1999 年 2 月 5 日 为优先权日,
专利局的申请日 为优先权日,
专利局的申请日 为优先权日,

3. ☐ 申请人于 年 月 日提交的修改文件, 不符合专利法实施细则第 51 条的规定。

☒ 申请人提交的下列修改文件不符合专利法第 33 条的规定, 因而不能接受:

☐ 国际初步审查报告附件的中文译文。

☐ 依据专利合作条约第 19 条规定所提交的修改文件的中文译文。

☐ 依据专利合作条约第 28 条或 41 条规定所提交的修改文件。

☒ 依据专利合作条约第 41 条规定所提交的权利要求 36-38。

修改不能被接受的具体理由见通知书正文部分。

4. ☐ 审查是针对原始提交的国际申请的中文译文进行的。

☒ 审查是针对下述申请文件进行的:

说明书 第 1-7 页, 按照原始提交的国际申请文件的中文译文;

第 页, 按照国际初步审查报告附件的中文译文;

第 页, 按照依据专利合作条约第 28 条或 41 条规定所提交的修改文件;

第 页, 按照依据专利法实施细则第 51 条规定所提交的修改文件。

权利要求 第 项, 按照原始提交的国际申请文件的中文译文;

第 项, 按照依据专利合作条约第 19 条规定所提交的修改文件的中文译文。

第 项, 按照国际初步审查报告附件的中文译文;

第 1-35 项, 按照依据专利合作条约第 28 条或 41 条所提交的修改文件;

第 项, 按照依据专利法实施细则第 51 条规定所提交的修改文件。

附图 第 1-2 页, 按照原始提交的国际申请文件的中文译文;

第 页, 按照国际初步审查报告附件的中文译文;

第 页, 按照依据专利合作条约第 28 条或 41 条所提交的修改文件;

第 页, 按照依据专利法实施细则第 51 条规定所提交的修改文件。

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2002.1



回函请寄: 100088 北京市海淀区蓟门桥西土城路 6 号 国家知识产权局专利局受理处收
(注: 凡寄给审查员个人的信函不具有法律效力)



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5. ☒ 本通知书引用下述对比文献 (其编号在今后的审查过程中继续沿用):

编号	文件号或名称	公开日期 (或抵触申请的申请日)
1	US5644651A	1997.07.01
2	EP0383269A2	1990.08.22
3		
4		

6. 审查的结论性意见:

☒ 关于说明书:

- ☐ 申请的内容属于专利法第 5 条规定的不授予专利权的范围。
☐ 说明书不符合专利法第 26 条第 3 款的规定。
☒ 说明书的撰写不符合专利法实施细则第 18 条的规定。

☒ 关于权利要求书:

- ☐ 权利要求 ____ 不具备专利法第 22 条第 2 款规定的新颖性。
☒ 权利要求 1, 2 不具备专利法第 22 条第 3 款规定的创造性。
☐ 权利要求 ____ 不具备专利法第 22 条第 4 款规定的实用性。
☐ 权利要求 ____ 不符合专利法第 26 条第 4 款的规定。
☒ 权利要求 27, 28 不符合专利法第 31 条第 1 款的规定。
☐ 权利要求 ____ 不符合专利法实施细则第 2 条第 1 款关于发明的定义的规定。
☐ 权利要求 ____ 不符合专利法实施细则第 13 条第 1 款的规定。
☒ 权利要求 1, 26, 29-35 不符合专利法实施细则第 20 条至第 23 条的规定。
☐

上述结论性意见的具体分析见本通知书的正文部分。

7. 基于上述结论性意见, 审查员认为:

- ☐ 申请人应按照通知书正文部分提出的要求, 对申请文件进行修改。
☒ 申请人应在意见陈述书中论述其专利申请可以被授予专利权的理由, 并对通知书正文部分中指出的不符合规定之处进行修改, 否则将不能授予专利权。
☐ 专利申请中没有可以被授予专利权的实质性内容, 如果申请人没有陈述理由或者陈述理由不充分, 其申请将被驳回。
☐

8. 申请人应注意下述事项:

- (1) 根据专利法第 37 条的规定, 申请人应在收到本通知书之日起的 肆 个月内陈述意见, 如果申请人无正当理由逾期不答复, 其申请将被视为撤回。
(2) 申请人对其申请的修改应符合专利法第 33 条的规定, 修改文本应一式两份, 其格式应符合审查指南的有关规定。
(3) 申请人的意见陈述书和/或修改文本应邮寄或递交给中国专利局受理处, 凡未邮寄或递交给受理处的文件不具备法律效力。
(4) 未经预约, 申请人和/或代理人不得前来中国专利局与审查员举行会晤。

9. 本通知书正文部分共有 1 页, 并附有下列附件:

- ☒ 引用的对比文件的复印件共 2 份 22 页。
☐



第一次审查意见通知书正文

本发明专利申请涉及一种数字视频处理方法及其装置。根据说明书的记载，其所要解决的技术问题是提供一种允许根据强度进行数字视频处理的方法及其装置。审查意见如下：

1、权利要求 36-38 不符合专利法第三十三条的规定。

申请人根据 PCT 条约第 41 条规定提交了权利要求书的替换页，增加了新的权利要求 36-38。权利要求 36 请求保护一种根据运动信息表示视频数据的方法，权利要求 37 请求保护一种具有由计算机根据运动信息执行用于表示视频数据的方法的可执行程序码的计算机可读介质，权利要求 38 请求保护一种用于根据运动信息表示视频数据的装置。而在申请人提交的原始申请文件中，并没有描述到上述方法、可读介质和装置的技术方案，并且上述权利要求的技术方案也不能够从原始申请文件中唯一地、毫无疑义地导出，因此，申请人关于权利要求 36-38 的修改超出了原始申请文件记载的范围，不符合专利法第三十三条的规定。

2、权利要求 1、2 不符合专利法第二十二条第三款有关创造性的规定。

权利要求 1 请求保护一种处理以压缩视频码流的形式接收的数字图像的方法，对比文件 1 (US5644651A) 公开了一种三维图象评价方法，并披露了下述技术特征：根据各个图象帧中像素的运动补偿信息确定像素的强度柱状图（见对比文件 1 说明书 1 栏 62 行-6 栏 31 行，附图 1-4）。

权利要求 1 与对比文件 1 的区别技术特征为：A、权利要求 1 中是对以压缩视频码流的形式接收的数字图像进行处理，B、权利要求 1 中是确定区域强度直方图。上述区别技术特征 B 所要解决的技术问题是对特定区域进行处理。对比文件 1 (EP0383269A2) 公开了一种区域适应图形技术，并披露了下述技术特征：选取图象中特定区域的多个像素，确定相应区域像素的密度柱状图并进行后续处理（见对比文件 2 说明书 3 页 43 行-4 页 8 行，附图 1-7）。其所要解决的技术问题也是选取特定区域进行处理。而柱状图与直方图实质上相同，都是利用图形表示强度的一种方法，并且以压缩视频码流的形式接收数字图像也属于本领域公知常识。因此，本领域技术人员在对比文件 1 的基础上，为对区域进行处理，很容易从对比文件 2 中获得启示，将其与对比文件 1 及本领域公知常识结合起来，得到权利要求 1 的技术方案，权利要求 1 相对于对比文件 1、

2 和本领域公知常识不具有突出的实质性特点和显著的进步，不符合专利法第二十三条第三款有关创造性的规定。

权利要求 2 引用权利要求 1，其附加技术特征为：接收视频码流，利用预定算法分组视频码流为多个组，选择待处理的一个组。由于接收视频码流并将其进行分组，再选择待处理的一个组属于本领域公知的处理视频码流的技术步骤，而利用一个预定算法对视频码流进行分组也是本领域技术人员根据其公知常识容易想到的，因此，权利要求 2 相对于对比文件 1、2 和本领域公知常识不具有突出的实质性特点和显著的进步，不符合专利法第二十三条第三款有关创造性的规定。

3、权利要求 1、15 不符合专利法实施细则第二十一条第二款的规定。

权利要求 1 请求保护一种处理以压缩视频码流的形式接收的数字图像的方法，其所要解决的技术问题是根据各个互帧的运动补偿信息确定区域强度直方图，从而利用强度直方图对数字视频信号进行处理。因此，如何确定各个互帧的运动补偿信息，如何根据运动补偿信息确定区域强度直方图等技术步骤，即权利要求 3 中的各技术步骤是权利要求 1 的必要技术特征，若无上述技术步骤，则不能够正确确定区域强度直方图，也就不能够解决本申请所要解决的技术问题，无法达到其技术效果，因此，权利要求 1 不符合专利法实施细则第二十一条第二款的规定。

权利要求 15 请求保护一种包括相对于各互帧定义运动补偿值为 0 的块作为运动活性分配的步骤的数字视频处理方法，其所要解决的技术问题也是根据各个互帧的运动补偿信息，即运动补偿值为 0 的块确定区域强度直方图，从而利用强度直方图对数字视频信号进行处理。因此，如何确定各个互帧的运动补偿信息，如何根据运动补偿信息确定区域强度直方图等技术步骤，即权利要求 3 中的各技术步骤也是权利要求 15 的必要技术特征，若无上述技术步骤，则不能够正确确定区域强度直方图，也就不能够解决本申请所要解决的技术问题，无法达到其技术效果，因此，权利要求 15 不符合专利法实施细则第二十一条第二款的规定。

4、权利要求 1-26、29-35 不符合专利法实施细则第二十条第一款的规定。

权利要求 1 请求保护一种处理以压缩视频码流的形式接收的数字图像的方法，其中“(RIH)”使用了带括号的描述，而 RIH 并非附图标记，因此，权利要求 1 不符合专利法实施细则第二十条第四款的规定。由于缩写词“RIH”并非本领域通用技术术语，并且对于不同技术领域其具有不同的含义，因此，权利要求 1、2 也不符合专利法实施细则第二十条第一款的规定。

权利要求 3 请求保护一种处理以压缩视频码流的形式接收的数字图像的方法，其中的步骤 (a) - (f) 并没有出现在其前面的描述中，因此，权利要求 3 不能清楚限定请求保护的范围，不符合专利法实施细则第二十条第一款的规定。

权利要求 4、5 中的步骤 (a)、(g)、(f)、(h) 等也没有出现在其前面的描述中，因此，权利要求 4、5 不能清楚限定请求保护的范围，不符合专利法实施细则第二十条第一款的规定。

权利要求 6、7 中的“预定算法”与其引用的权利要求 4 中的“预定的算法”描述不同，不能清楚说明是否是同一算法，因此，权利要求 6、7 不能清楚限定请求保护的范围，不符合专利法实施细则第二十条第一款的规定。

权利要求 8 中的“(MPEG)-7”含义不清楚，并且出现了带括号的描述，不符合专利法实施细则第二十条第一款的规定。

权利要求 9-14 中也出现了带括号的描述“(RIH)”，而 RIH 并非附图标记，因此，权利要求 9-14 不符合专利法实施细则第二十条第四款的规定。由于缩写词“RIH”并非本领域通用技术术语，并且对于不同技术领域其具有不同的含义，因此，权利要求 9-14 也不符合专利法实施细则第二十条第一款的规定。此外，权利要求 14 的附加技术特征与其引用的权利要求 9-11 重复，不符合专利法实施细则第二十条第一款有关“简要”的规定。

★ 权利要求 15 请求保护一种包括相对于各互帧定义运动补偿值为 0 的块作为运动活性分配的步骤的数字视频处理方法，其没有清楚描述出“运动活性分配”的确切含义，因此，不能清楚限定请求保护的范围，不符合专利法实施细则第二十条第一款的规定。

权利要求 16-22 请求保护一种具有由执行数字视频处理方法的计算机可执行的程序码的计算机可读介质，其保护的名称是“计算机可读介质”，而其实际上是保护一种“数字视频处理方法”，因此，权利要求 16-22 所请求保护的名称的类型不清楚，不符合专利法实施细则第二十条第一款的规定。若申请人将权利要求 16-22 改为方法权利要求，则其保护范围实质上与权利要求 3-9 相同，仍将不符合专利法实施细则第二十条第一款的规定。

权利要求 23 请求保护一种数字视频处理装置，其中也出现了带括号的描述“(RIH)”及缩写词“RIH”，而 RIH 并非附图标记。此外，权利要求 23 中第 8-9 行中的“一个区域”的描述没有清楚说明其是哪个区域，是否与所计算的“第 i 级中的互帧数”属同一区域。因此，权利要求 23 不能清楚限定请求保护的范围，不符合专利法实施细则第二十条第一款的规定。

权利要求 24-26 中包含有缩写词“RIH”，由于缩写词“RIH”并非本领域

通用技术术语，并且对于不同技术领域其具有不同的含义，因此，权利要求 24-26 也不符合专利法实施细则第二十条第一款的规定。

权利要求 29、30 分别请求保护一种在压缩的视频码流中搜索希望的数字视频景物的方法和装置，其中也包含有缩写词“RIH”；此外，权利要求 30 中第 4 行的“RIH 信息的信息的视频码流”含义不清。因此，权利要求 29、30 不符合专利法实施细则第二十条第一款的规定。

权利要求 31-34 请求保护一种数字视频处理装置，权利要求 35 请求保护一种请求保护一种在压缩的视频码流中搜索希望的数字视频景物的装置，由于其技术特征除用“单元”来代替权利要求 23-26 及权利要求 30 中的“装置”外，其余均相同，而“单元”与“装置”本身并没有实质区别，因此，权利要求 31-34、35 的保护范围分别与权利要求 23-26、30 实质上相同，权利要求 31-35 不符合专利法实施细则第二十条第一款有关“简要”的规定。

5、权利要求 27-28 不符合专利法第三十一条第一款的规定。

权利要求 27 请求保护一种数字视频分析方法，其技术方案中没有与权利要求 3 相同的技术特征，因此，也必然缺乏相同的特定技术特征，并且其与权利要求 3 的技术方案不属于一个总的发明构思，因此，不符合专利法第三十一条第一款有关单一性的规定。引用权利要求 27 的权利要求 28 也不符合专利法第三十一条第一款有关单一性的规定。

6、说明书的撰写不符合专利法实施细则第十八条第三款的规定。

此外，说明书 2 页 20 行的“MPEG)-7”含义不清。说明书的撰写不符合专利法实施细则第十八条第三款的规定。

综上所述，本发明专利申请按照其目前文本是不能被授予专利权的。申请人应在规定时间内针对本审查意见通知书正文部分指出的不符合规定之处进行修改并陈述意见。修改时应满足专利法第三十三条的规定，不得超出原说明书和权利要求书记载的范围，并根据修改后的权利要求对说明书技术方案部分进行适应性修改。如果申请人不能在本通知书规定的答复期限内克服上述缺陷或表明其具有符合所述规定的充分理由，本申请将被驳回。申请人应提供修改所涉及的原文复印件，并将修改之处用彩笔标示清楚。



The Patent Office of the People's Republic of China

Address: No.6 XITUCHENG ROAD, JIMEN BRIDGE, HAIDIAN DISTRICT, BEIJING

Post code: 100088

LIU, SHEN & ASSOCIATES
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DONG STREET, CHAO YANG DISTRICT
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ISSUING DATE:

2003.12.26.

Application NO.: 00803994.1	Applicant: SAMSUNG ELECTRONICS CO. LTD.
Application Date: 2000.2.3.	Agent: TING MA.
Title: DIGITAL VIDEO PROCESSING METHOD AND ...	

THE FIRST OFFICE ACTION
(PCT application for entry into the national phase)

1. ☒ The applicant filed a request for substantive examination on Year ___ Month ___ Day ___. According to Article 35 paragraph 1 of the Patent Law, the examiner has conducted a substantive examination to the above-mentioned patent application.

☐ According to Article 35 paragraph 2 of the Patent Law, Chinese Patent Office decided, on its own initiative, to conduct a substantive examination to the above-mentioned patent application.

2. ☒ The applicant requested to take

Year 99 Month 2 Day 5, on which an application is filed with the US patent office, as the priority date,

Year ___ Month ___ Day ___, on which an application is filed with the ___ patent office, as the priority date,

Year ___ Month ___ Day ___, on which an application is filed with the ___ patent office, as the priority date.

3. ☒ The amended document(s) submitted by the applicant is/are not accepted because the said amendment(s) is/are not in conformity with the provision of Article 33 of the Chinese Patent Law.

☐ The Chinese translation of the annexes of the International Preliminary Examination Report.

☐ The Chinese translation of the amendments submitted under Article 19 of PCT.

☒ The ~~claim~~ 36-38 submitted under Article 41 of PCT.

☐ The amendment(s) submitted under Rule 51 of The Implementing Regulations of the Patent Law

The concrete reason(s) for not accepting the amendment(S) is/are presented on the text of this Office Action.

4. ☐ The examination has been conducted on the initially filed Chinese translation of the text of the application.

☒ The examination has been conducted on the following text(s):

☒ Specification, page(s) 1-7, as originally filed

page(s) _____, as the annexes of the International Preliminary Examination Report

page(s) _____, as the amendment(s) submitted under Article 28 or 41 of PCT

page(s) _____, as the amendment(s) submitted under Rule 51 of The Implementing

Regulations of the Patent Law

☒ Claim, _____, as originally filed

_____, as the Chinese translation of the amendment(s) submitted under Article 19 of PCT

_____, as the annexes of the International Preliminary Examination Report

1-35, as the amendment(s) under Article 28 or 41 of PCT

_____, as the amendment(s) under Rule 51 of The Implementing Regulations of the Patent

Law

☒ Figure, 1-2, as originally filed

_____, as the annexes of the International Preliminary Examination Report

_____, as the amendment(s) under Article 28 or 41 of PCT

_____, as the amendments under Rule 51 of The Implementing Regulations of the Patent Law

5. ☒ The following reference document(s) is/are cited by this notification: (the reference numeral(s) thereof will be used in the examination procedure hereafter)

NO.	Reference No. and Title	Publishing Date (or the filing date of rivals)
1	US 5644651A	Year 97 month 7
2	EP0383269A2	Year 90 month 8
3		Year month
4		Year month

6. Concluding comments

☒ on the specification:

☒ The specification is not in conformity with the provision of Rule 18 of the Implementing Regulations of the Patent Law.

☐ The figures is not in conformity with the provision of Rule 19 paragraph 3 of the Implementing Regulations of the Patent Law.

☐ The specification is not in conformity with the provision of Article 26 paragraph 3 of the Patent Law.

☐ The contents of the application are in contrary to Article 5 of the Patent Law and therefore are not

patentable

☒ on the claims:

☐ Claim(s) _____ belong(s) to non-patentable subject matter as prescribed in Article 25 of the Patent Law

☐ Claim(s) _____ do(es) not possess novelty as requested by Article 22 paragraph 2 of the Patent Law.

☒ Claim(s) 1, 2 do(es) not possess inventiveness as requested by Article 22 paragraph 3 of the Patent Law.

☐ Claim(s) _____ do(es) not possess the practical applicability as requested by Article 22 paragraph 4 of the Patent Law.

☐ Claim(s) _____ do(es) not comply with the provision of Article 26 paragraph 4 of the Patent Law.

☒ Claim(s) 27-28 do(es) not comply with the provision of Article 31 paragraph 1 of the Patent Law.

☒ Claim(s) 1-26, 29-35 do(es) not comply with the provision of Rule 20 to 23 of the Implementing Regulations of the Patent Law.

☐ Claim(s) _____ do(es) not comply with the provision of Article 9 of the Patent Law.

☐ Claim(s) _____ do(es) not comply with the provision of Rule 12 paragraph 1 of the Implementing Regulations of the Patent Law.

The detailed analysis for the above concluding comments is/are presented on the text of this Office Action.

7. Based on the above concluding comments, the examiner is of the opinions that:

☐ The applicant should amend the application document(s) in accordance with the requirement as specified in the Office Action.

☒ The applicant should, in his observation, expound the patentability of the application, amend the defects pointed out in the Office Action; or the application can hardly be approved.

☐ The examiner deems that the application lacks substantive features to make it patentable. Therefore, the application will be rejected if no convincing reasons are provided to prove its patentability.

8. The applicant should pay attention to the following matters:

(1) According to Article 37 of the Patent Law, the applicant is required to submit his observations within four months upon receipt of this Office Action. If the time limit for making response is not met without any justified reason, the application shall be deemed to have been withdrawn.

(2) The amendment(s) made by the applicant must meet the provision of Article 33 of the Patent Law. The amended text should be in duplicate, its format should conform to the related confinement in the Guidance for Examination.

(3) The observation and the amended document(s) must be mailed or delivered to the Receiving Section of the Chinese Patent Office. No legal effect shall apply for any document(s) that not mailed to or reached the Receiving Section.

(4) Without being invited, the applicant and/or the agent should not go to the Chinese Patent Office to interview an examiner.

9. The text of this Office Action contains 4 page(s), and has the following attachment(s):

☒ 2 copies of the cited references, total 22 pages.

Examination Section No. _____ Examiner _____ Seal of Examination Dept. For business only (if the Office Action wasn't stamped by the specified seal, it has no legal effect)

TEXT OF THE FIRST OFFICE ACTION

The present invention patent application relates to a digital video processing method and apparatus thereof. According to the disclosure of the specification, the technical problem to be solved is to provide a method and an apparatus which allow for digital video processing based on intensity. And the examination opinions are provided as follows:

1. Claims 36-38 do not comply with the provision of Article 33 of the Chinese Patent Law.

The applicant submitted the replacement sheets of the claims in accordance with Rule 41 of Patent Cooperation Treaty and added new claims 36-38. Claim 36 is for a method for representing video data based on motion information, claim 37 is for a computer readable medium having program codes executable by a computer to perform a method for representing video data based on motion information and claim 38 is for an apparatus for representing video data based on motion information. However, the technical solutions of the above method, computer readable medium and apparatus are not described in the original application documents submitted by the applicant. Furthermore, the technical solutions of the above claims can not be uniquely derived from the original application documents without any doubt. Therefore, the amendments to claims 36-38 have gone beyond the initial disclosure of the application documents, which does not comply with the provision of Article 33 of the Chinese Patent Law.

2. Claims 1 and 2 do not comply with the relevant provision on inventiveness as prescribed in Article 22, clause 3 of the Chinese Patent Law.

Claim 1 is for a method for processing digital images received in the form of compressed video streams. Reference 1 (US 5644651A) discloses a method for the estimation of a three dimensional image with the technical feature disclosed as follows: determining a pixel intensity histogram based on information on motion compensation of pixels in respective image frames (refer to col. 1, line 62 to col. 6, line 31 of the specification and Figs. 1-4 in Reference 1).

The distinctive technical features between claim 1 and Reference 1 lies in: A. claim 1

is for processing digital images received in the form of compressed video streams, B. claim 1 is for determining a region intensity histogram. The technical problem to be solved by the above distinctive technical feature B is performing processing to the specific region. Reference 2 (EP 0383269 A2) discloses a regionally adaptive imaging techniques with the technical features disclosed as follows: selecting a plurality of pixels in the specific region in the image, determining a intensity histogram of pixels in the corresponding regions and performing following process (refer to line 43, page 3 to line 8, page 4 of the specification and Figs. 1-7 in Reference 2). The technical problem to be solved is also selecting the specific region to perform process. Moreover, the two histograms are the same in essence, which are methods both for showing the intensity by using diagrams. Furthermore, receiving digital images in the form of compressed video streams also belongs to the common sense in the art. Therefore, in order to process the region, it is not difficult for a person skilled in the art to obtain the technical solution of claim 1 by combining the inspirations obtained from Reference 2 with Reference 1 and the common sense in the art based on Reference 1. Claim 1 does not comply with the relevant provision on inventiveness as prescribed in Article 22, clause 3 of the Chinese Patent Law in that it does not possess any prominent substantive feature, nor does it represent a notable progress as compared with References 1, 2 and the common sense in the art.

Claim 2 refers to claim 1, and the additional technical features of claim 2 are: receiving video streams; grouping the video streams into a plurality of groups using a predetermined algorithm; and selecting a group to be processed. Since receiving video streams, grouping them and selecting a group to be processed belong to common technical steps of processing video streams in the art, and it is also not difficult for a person skilled in the art to think of grouping the video streams by using a predetermined algorithm. Therefore, claim 2 does not comply with the relevant provision on insensitiveness as prescribed in Article 22, clause 3 of the Chinese Patent Law in that it does not possess any prominent substantive feature, nor does it represent a notable progress as compared with References 1 and 2 and the common sense in the art.

3. Claims 1 and 15 do not comply with the provision of Rule 21, paragraph 2 of the Implementing Regulations of the Chinese Patent Law.

Claim 1 is for a method for processing digital images received in the form of compressed video streams, and the technical problem to be solved by it is determining a region intensity histogram based on information on motion compensation of inter

frames, thereby processing the digital video images using the intensity histogram. Therefore, the technical steps of how to determine the information on motion compensation of inter frames and how to determine the region intensity histogram based on information on motion compensation etc. i.e. the technical steps in claim 3 are the indispensable technical features of claim 1. Without the above technical steps, the region intensity histogram can not be determined properly, and the technical problem to be solved by the present application can not be solved, thus the technical effects can not be achieved either. Therefore, claim 1 does not comply with the provision of Rule 21, paragraph 2 of the Implementing Regulations of the Chinese Patent Law.

Claim 15 is for a digital video processing method comprising the step of defining the distribution of blocks whose motion compensation values are zero as motion activity, with respect to inter frames, and the technical problem to be solved by it is also determining a region intensity histogram based on information on motion compensation of inter frames, i.e. blocks whose motion compensation values are zero, thereby processing the digital video images by using the intensity histogram. Therefore, the technical steps of how to determine the information on motion compensation of inter frames and how to determine the region intensity histogram based on information on motion compensation etc. i.e. the technical steps in claim 3 are also the indispensable technical features of claim 15. Without the above technical steps, the region intensity histogram can not be determined properly, and the technical problem to be solved by the present application can not be solved, thus the technical effects can not be achieved either. Therefore, claim 15 does not comply with the provision of Rule 21, paragraph 2 of the Implementing Regulations of the Chinese Patent Law.

4. Claims 1-26 and 29-35 do not comply with the provision of Rule 20, paragraph 1 of the Implementing Regulations of the Chinese Patent Law.

Claim 1 is for a method for processing digital images received in the form of compressed video streams, the description “(RIH)” with parentheses appear and RIH is non-reference sign. Therefore, claim 1 does not comply with the provision of Rule 20, paragraph 4 of the Implementing Regulations of the Chinese Patent Law. Since the abbreviation “RIH” is not the common technical term in the art, and it has different meanings in different technical fields, claims 1 and 2 do not comply with the provision of Rule 20, paragraph 1 of the Implementing Regulations of the Chinese Patent Law either.

Claim 3 is for a method for processing digital images received in the form of compressed video streams, wherein the steps (a) - (f) are not recorded in the previous description. Therefore, claim 3 does not comply with the provision of Rule 20, paragraph 1 of the Implementing Regulations of the Chinese Patent Law for failing to define the protection scope clearly.

Steps (a), (g), (f) and (h) etc. in claims 4 and 5 also fail to be recorded in the previous description, therefore, claims 4 and 5 do not comply with the provision of Rule 20, paragraph 1 of the Implementing Regulations of the Chinese Patent Law for failing to define the protection scope clearly.

A problem relating to Chinese equivalent occurs in claims 6 and 7, details omitted.

The meaning of "(MPEG)-7" defined in claim 8 is not clear and descriptions with parentheses appear therein, which does not comply with the provision of Rule 20, paragraph 1 of the Implementing Regulations of the Chinese Patent Law.

The description "(RIH)" with parentheses also appear in the claims 9-14 and RIH is non-reference sign, therefore, claims 9-14 do not comply with the provision of Rule 20, paragraph 4 of the Implementing Regulations of the Chinese Patent Law. Since the abbreviation "RIH" is not the common technical term in the art, and it has different meanings in different technical fields, claims 9-14 do not comply with the provision of Rule 20, paragraph 1 of the Implementing Regulations of the Chinese Patent Law either. In addition, the additional technical feature of claim 14 is repetitious with the additional technical features of claims 9-11 that claim 14 refers to, which does not comply with the relevant provision on "conciseness" as prescribed in Rule 20, paragraph 1 of the Implementing Regulations of the Chinese Patent Law.

A Chinese wording problem relates to claim 15, details omitted.

Claims 16-22 are for a computer readable medium having program codes executable by a computer to perform a digital video processing method, and the subject matter title sought for protection is "a computer readable medium", however, they are for "a digital video processing method" in essence. Therefore, the type of the subject matter title sought for protection in claims 16-22 is not clear, which does not comply with the provision of Rule 20, paragraph 1 of the Implementing Regulations of the Chinese Patent Law. If the applicant amends claims 16-22 into method claims, their protection

scopes are the same with those of claims 3-9 in essence and they still do not comply with the provision of Rule 20, paragraph 1 of the Implementing Regulations of the Chinese Patent Law.

Claim 23 is for a digital video processing apparatus, wherein the description "(RIH)" with parentheses and abbreviation "RIH" also appear, furthermore, RIH is non-reference sign. In addition, the description of "a region" in line 13 of claim 23 fails to specify which region it is, whether it belongs to the same region with the calculated "number of inter frames in the i th level". Therefore, claim 23 does not comply with the provision of Rule 20, paragraph 1 of the Implementing Regulations of the Chinese Patent Law for failing to define clearly the protection scope.

The abbreviation of "RIH" are included in claims 24-26, since the abbreviation "RIH" is not the common technical term in the art, and it has different meanings in different technical fields, claims 24-26 do not comply with the provision of Rule 20, paragraph 1 of the Implementing Regulations of the Chinese Patent Law either.

Claims 29 and 30 are for a method and an apparatus for searching for a desired digital video scene in compressed video streams respectively, wherein the abbreviation of "RIH" is also included; in addition, the meaning of "video streams including the information as the RIH information" in line 7 of claim 30 is not clear. Therefore, claims 29 and 30 do not comply with the provision of Rule 20, paragraph 1 of the Implementing Regulations of the Chinese Patent Law.

Claims 31-34 are for a digital video processing apparatus, claim 35 is for an apparatus for searching for a desired digital video scene in compressed video streams, and their remaining technical features are the same with those of claims 23-26 and claim 30 except for substituting "unit" therein for "apparatus" in claims 23-26 and claim 30. However, no essential difference exists between "unit" and "apparatus". Therefore, the protection scopes of claims 31-34 and 35 are respectively the same with those of claims 23-26 and 30 in essence, and claims 31-35 do not comply with the relevant provision on "conciseness" as prescribed in Rule 20, paragraph 1 of the Implementing Regulations of the Chinese Patent Law.

5. Claims 27-28 do not comply with the provision of Article 31, clause 1 of the Chinese Patent Law.

Claim 27 is for a digital video analyzing method, and the technical solution of the

claim does not possess identical technical feature with that of claim 3. Thus, they must lack identical specific technical feature therebetween; furthermore, the technical solution of claim 27 and that of claim 3 do not belong to one general inventive concept, therefore, said claim 27 does not comply with the provision on unity as prescribed in Article 31, clause 1 of the Chinese Patent Law. Claim 28 that refers to claim 27 does not comply with the provision on unity as prescribed in Article 31, clause 1 of the Chinese Patent Law either.

6. The drafting of the specification does not comply with the provision of Rule 18, paragraph 3 of the Implementing Regulations of the Chinese Patent Law.

In addition, the meaning of "MPEG-7" in line 5, page 3 of the specification is not clear. Therefore, the drafting of the specification does not comply with the provision of Rule 18, paragraph 3 of the Implementing Regulations of the Chinese Patent Law.

To sum up, the present invention patent application can not be granted a patent right under the current text. The applicant should make amendments to the defects that do not comply with the relevant provisions as pointed out in the text of this Office Action and state reasons within the specified time limit. The amendments shall comply with the provision of Article 33 of the Chinese Patent Law and shall not go beyond the initial disclosure of the specification and claims, and the technical solution section of the specification shall be made adaptive amendments in accordance with the amended claims. If the applicant fails to overcome the above defects or fails to state sufficient reasons to prove that the present application does comply with said provisions within the time limit specified in this Office Action, the present application will be rejected. The amended documents to be submitted by the applicant shall include: a copy of the original text concerning the part due to be amended, in which any insertion, deletion or replacement should be made in red; and a set of replacement sheets in duplicate.

Examiner: Pei Suying

LHY